<u>REMARKS</u>

This application has been reviewed in light of the Office Action dated December 20, 2006. Claims 1-35 are pending in this application, and have been amended to define more clearly what Applicants regard as their invention. Claims 1, 10, 18, 27, and 30-33 are in independent form. Favorable reconsideration is requested.

The Office Action does not acknowledge that a certified copy of the French priority document has been received. However, a certified copy of the priority document was received by the Patent and Trademark Office on October 28, 2003, as evidenced by the attached PAIR printout. Applicants respectfully submit that a certified copy of the priority document has been filed in this application, and request that acknowledgment of such be made.

An Information Disclosure Statement and a corresponding Form PTO-1449 was filed on July 18, 2003, as evidenced by the attached PAIR printout. Applicants respectfully request the Examiner to return an initialed copy of the Form PTO-1449, indicating the references cited thereon were considered.

Claims 30-33 were objected to under 37 C.F.R. § 1.75(c) as being in improper dependent form for failing to further limit the subject matter of a previous claim. Claims 30-33 have been rewritten in independent form, as suggested by the Examiner. Accordingly, withdrawal of the objection under 37 C.F.R. § 1.75(c) is respectfully requested.

Claims 1-35 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

At paragraph 5 of the Office Action, the Examiner states that independent Claims 1, 10, 18, and 27 are directed to an abstract idea, and do not produce a tangible result. This rejection is respectfully traversed.

To meet the requirements of 35 U.S.C. § 101, "[t]he claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.'" M.P.E.P. § 2106(II)(A) (quoting *State Street Bank & Trust v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed. Cir. 1998)).

Claim 1, for example, now recites a method of scrambling a digital signal. Therefore, the method produces a useful, concrete, and tangible result, i.e., a scrambled digital signal which can then be, for example, transmitted.

Accordingly, it is respectfully submitted that Claim 1 is directed to statutory subject matter in accordance with 35 U.S.C. § 101.

Independent Claims 10, 18, and 27 are each believed to be directed to statutory subject matter in accordance with 35 U.S.C. § 101, for similar reasons to those discussed above in connection with Claim 1.

At paragraph 6 of the Office Action, the Examiner states that Claims 34 and 35 "are directed to functional descriptive material (i.e. software)", and "are rejected as being directed to functional descriptive material (i.e. computer program)".

Claims 34 and 35 now each recite a computer program stored in a computer-readable medium.

For all of the foregoing reasons, withdrawal of the rejection under Section 101 is respectfully requested.

Claims 1-4, 9-13, 18-21, and 26-35 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,501,860 to *Charrier*. Claims 5-8, 14-17, and 22-25 were rejected under 35 U.S.C. § 103(a) as being obvious from *Charrier* in view of U.S. Patent No. 7,003,666 to *Inoue*.

Claim 1 is directed to a method of scrambling a digital signal, including the steps of decomposing the signal into several regions each containing digital data, and encoding the signal in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered. The method further includes the step of modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered.

Among other notable features of Claim 1 are (1) encoding a digital signal in a format comprising header data specific to each region of the signal and which comprise at least one part representing the amplitude of the data of the region considered, and (2) modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered.

By virtue of the features of Claim 1, a modifying step, of modifying among the header data specific to at least one region of the signal the part of the header data representing the amplitude of the data of the region considered, is performed after data is encoded. See, for example, Fig. 5 of the present application, in which step 512 represents

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an encoding of blocks and step 518 represents a modification.[1] In this way, the modifying step according to Claim 1 is different from the encoding step.

Charrier relates to digital signal coding and decoding based on subbands. In *Charrier*, the signal is decomposed into sub-bands at step El (Fig. 8). The Examiner cites (at page 4 of the Office Action) Figs. 1 and 8 and column 1, lines 13-28 of that patent, as allegedly teaching header data representing the amplitude of the data of a signal region. However, column 1, lines 13-28 of that patent merely discusses the wavelet transform principle used to decorrelate the signal so as to eliminate redundancy therefrom prior to the compression proper. No "header data" is mentioned in the cited paragraph.

Moreover, step E3 of Fig. 8 of *Charrier* is a step of coding a part of the decomposed signal. Steps E7 and E8 are two coding steps of other parts of the decomposed signal, as explained at column 15, line 23 to column 16, line 40. However, these coding steps (steps E3, or E7, E8) cannot read on a modifying step of a signal according to the method of Claim 1, since the claimed modifying step takes place *after* encoding of the data, as explained above. In Fig. 8 of *Charrier*, after the encoding step (E3, E7, E8), there is no indication of any modifying of the signal. Furthermore, there is no teaching in *Charrier* of modifying header data representing the amplitude of signal data.

Nothing in *Charrier* would teach or suggest (1) encoding a digital signal in a format comprising header data specific to each region of the signal and which comprise at least one part representing the amplitude of the data of the region considered, and (2) modifying among the header data specific to at least one region of the signal, the part of the

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[1]It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited by the details shown in the portions referred to.

header data representing the amplitude of the data of the region considered, as recited in Claim 1.

Accordingly, Claim 1 is seen to be patentable over *Charrier*.

Independent Claims 18, 30, and 32 recite features which are similar in many relevant respects to those discussed above with respect to Claim 1 and therefore are also believed to be patentable over *Charrier* for at least the reasons discussed above.

Claim 10 is directed to a method of descrambling a digital signal decomposed into a plurality of regions each containing digital data, the signal being encoded in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered. The method includes receiving the signal of which the part of the header data representing the amplitude of the data of at least one region has undergone a modification before transmission of the signal, and modifying in reverse the modified part of the header data in order to restore the unmodified part of the header data of the signal.

Among other notable features of Claim 10 are receiving a signal of which the part of the header data representing the amplitude of the data of at least one region has undergone a modification before transmission of the signal, and modifying in reverse the modified part of the header data in order to restore the unmodified part of the header data of the signal.

At paragraph 14 of the Office Action, the Examiner alleges that *"Charrier* teaches a method/device/computer program" as per Claims 10 and 27 (among others). However, the indications in the Office Action of the portions of *Charrier* which are cited as being relevant against the features of the claims are unclear since these indications (e.g.

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"0029-0030" and "0148-0152") do not refer to any columns or lines of *Charrier*. The only clear indication is that of Fig. 2 of *Charrier* which refers to a breakdown of the signal into frequency sub-bands. However, this has nothing to do with the reverse modification recited in Claim 10.

In any event, since *Charrier* does not disclose the method and device of scrambling a digital signal as recited in Claims 1 and 18, as explained above, but a method of coding a signal without any modification of the signal after encoding, therefore, the part of *Charrier*'s description relating to the decoding method and device applied to the coded signal does not teach a reverse modification of a modified part of the header data representing the amplitude of data.

Nothing in *Charrier* would teach or suggest receiving a signal of which the part of the header data representing the amplitude of the data of at least one region has undergone a modification before transmission of the signal, and modifying in reverse the modified part of the header data in order to restore the unmodified part of the header data of the signal, as recited in Claim 10.

Accordingly, Claim 10 is seen to be patentable over *Charrier*.

Independent Claims 27, 31, and 33 recite features which are similar in many relevant respects to those discussed above with respect to Claim 10 and therefore are also believed to be patentable over *Charrier* for at least the reasons discussed above.

A review of the other art of record, including *Inoue*, has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

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The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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